

W.W. Rostow

The World Economy

History & Prospect

W.W. Rostow

The World Economy

History & Prospect

University of Texas Press Austin & London

**Publication of this book was made possible by a
grant from the Sid W. Richardson Foundation.**

Library of Congress Cataloging in Publication Data

**Rostow, Walt Whitman, 1916—
The world economy.**

Includes bibliographical references and index.

1. Economic history. 2. Economic forecasting.

I. Title.

HC51.R67 330.9 77-24053

ISBN 0-292-79008-2

Copyright © 1978 by Walt W. Rostow

All rights reserved

Set in Primer by G & S Typesetters, Inc.

Printed in the United States of America

**Since this page cannot legibly accommodate all
the copyright notices, the following pages constitute
an extension of the copyright page.**

Second Cloth Printing, 1980

First Paperback Printing, 1980

Grateful acknowledgment is made to the following for permission to quote copyrighted materials:

- Academic Press, Inc., and Glenn R. Hueckel, for material from Glenn Hueckel, "War and the British Economy, 1793-1815: A General Equilibrium Analysis," *Explorations in Economic History*, vol. 10, no. 4 (Summer 1973), p. 388.
- Almqvist & Wiksell and Östen Johansson, for material from Östen Johansson, *The Gross Domestic Product of Sweden and Its Composition, 1861-1955*.
- American Philosophical Society and John D. Durand, for material from John D. Durand, "The Modern Expansion of World Population," *Proceedings of the American Philosophical Society*, vol. 111, no. 3 (June 22, 1967).
- Arthavijnana* (Journal of the Gokhale Institute of Politics and Economics) and Morris David Morris, for material from Morris David Morris and Clyde B. Dudley, "Selected Railway Statistics for the Indian Subcontinent (India, Pakistan and Bangladesh), 1853-1946-47," *Arthavijnana*, vol. 17, no. 3 (September 1975).
- Association Internationale des Sciences Economiques, for material reproduced from a paper by Witold Langrod in the International Economic Association conference volume *Economics of International Migration*, edited by Brinley Thomas, published by Macmillan & CO Ltd., London, and the St. Martin's Press, New York, 1958.
- Banca Nazionale del Lavoro, for material from Angus Maddison, "Growth and Fluctuation in the World Economy, 1870-1960," *Quarterly Review*, no. 61 (June 1962).
- Thomas Senior Berry, for unpublished data furnished by Thomas Senior Berry of the University of Richmond, Virginia.
- The Brookings Institution, for material from:
- Why Growth Rates Differ: *Postwar Experience in Nine Western Countries*, by Edward F. Denison assisted by Jean-Pierre Poullier, © 1967 by the Brookings Institution, Washington, D.C.
- Trade in Primary Commodities: *Conflict or Cooperation?* a tripartite report by fifteen economists from Japan, the European Community, and North America, © 1974 by the Brookings Institution, Washington, D.C.
- Cooperative Approaches to World Energy Problems, a tripartite report by fifteen experts from the European Community, Japan, and North America, © 1974 by the Brookings Institution, Washington, D.C.
- Higher Oil Prices and the World Economy: *The Adjustment Problem*, Edward R. Fried and Charles L. Schultze, editors, © 1975 by the Brookings Institution, Washington, D.C.
- Barry Bosworth, James S. Duesenberry, and Andrew S. Carron, *Capital Needs in the Seventies* (Brookings Institution, 1975), Table 2-11, page 38.
- Curtis Brown, Ltd., for world rights to material from Lester R. Brown, *In the Human Interest*. Reprinted by permission of Curtis Brown Ltd. Copyright © 1974 by W. W. Norton Co., Inc.
- Cambridge University Press, for material from the following, all published by Cambridge University Press:
- Burn, D. L., *The Economic History of Steel-Making, 1867-1939*, p. 399 and Fig. 1.
- Butlin, N. G., *Australian Domestic Product, Investment and Foreign Borrowing, 1861-1938/39*, pp. 10-11, 460-461.
- Butlin, N. G., *Investment in Australian Economic Development, 1861-1900*, p. 51.
- Cairncross, A. K., *Home and Foreign Investment, 1870-1913*, Chart 1.
- Chaudhuri, K. N., *The Economic Development of India under the East India Company, 1814-58*, p. 26.
- Feinstein, C. H., *National Income, Expenditure, and Output of the United Kingdom, 1855-1965*.
- Habakkuk, H. J., and Postan, M., *The Cambridge Economic History of Europe*, vol. VI, pt. 1, "The Industrial Revolutions and After," pp. 68-69 from D. V. Glass and E. Grebenik, "World Population, 1800-1950."
- Thomas, Brinley, *Migration and Economic Growth*, p. 176.

- Allen, R. G. D., "The Immediate Contributors to Inflation," *The Economic Journal*, vol. 85, no. 339, p. 610.
- Commission on Critical Choices for Americans, for material from Volume I of a major project of the Commission on Critical Choices for Americans. The fourteen volumes of this project have been published by Lexington Books, D. C. Heath and Company. Volume I is entitled *Vital Resources*. Reprinted by the permission of the publisher. All rights reserved. © 1976 The Third Century Corporation.
- East-West Center and Lee-Jay Cho, for material from Lee-Jay Cho, *The Demographic Situation in the Republic of Korea*.
- The Economic History Association and Nathaniel H. Leff, for material from Nathaniel H. Leff, "Long-term Brazilian Economic Development," *The Journal of Economic History*, vol. 29, no. 3 (September 1969).
- The Economic History Society, for material from E. W. Cooney, "Long Waves in Building in the British Economy of the Nineteenth Century," *The Economic History Review*, 2d ser., vol. 13, no. 2 (December 1960).
- The Economist*, for material from *The Economist*, London.
- The Ford Foundation, for material reprinted from *Exploring Energy Choices* with permission of the Energy Policy Project of The Ford Foundation.
- Harcourt Brace Jovanovich, Inc., for material from Stuart Bruchey, *Cotton and the Growth of the American Economy: 1790-1860*.
- Harper & Row, Publishers, Inc., for material:
 Abridged from pp. 410, 411 and 422 in *Business Fluctuations*, 2nd Edition by Robert A. Gordon. Copyright © 1961 by Robert Aaron Gordon. Reprinted by permission of Harper & Row, Publishers, Inc.
 From *The Reinterpretation of American Economic History* edited by Robert William Fogel and Stanley L. Engerman: Table 1 (p. 26) by Robert E. Gallman and Edward S. Howle; Table 1 (pp. 123-4) by Robert Brooke Zevin. Harper & Row, 1971.
- Hart Schaffner & Marx, for material from the 1930 Hart Schaffner & Marx Prize Essay by Simon S. Kuznets, *Secular Movements in Production and Prices*.
- Harvard University Press, for material from the following, all published by Harvard University Press:
 Albert Feuerwerker, *China's Early Industrialization*, Copyright © 1958 by the President and Fellows of Harvard College.
 Albert H. Imlah, *Economic Elements in the Pax Britannica: Studies in British Foreign Trade in the Nineteenth Century*, Copyright © 1958 by the President and Fellows of Harvard College.
 Simon S. Kuznets, *Economic Growth of Nations*, Copyright © 1971 by Simon Kuznets; The Belknap Press of Harvard University Press.
 Wilfred Malenbaum, *The World Wheat Economy, 1885-1939*, Copyright © 1953 by the President and Fellows of Harvard College.
 Stanley J. Stein, *The Brazilian Cotton Manufacture*, Copyright © 1952 by the President and Fellows of Harvard College.
- The Hudson Institute, for material from 1973 *Synoptic Context on the Corporate Environment: 1973-1985*, vol. 2, © The Hudson Institute, Croton-on-Hudson, NY 10520.
- International Association for Research in Income and Wealth and O. J. Firestone, for material from O. J. Firestone, *Canada's Economic Development, 1867-1953*, Income and Wealth, Series VII.
- International Economic Association, for material from Walther G. Hoffmann, "The Take-off in Germany," Chapter 6 in *The Economics of Take-off into Sustained Growth*, ed. W. W. Rostow (New York: St. Martin's Press, 1963); and from J. Marczewski, "The Take-off Hypothesis and French Experience," in *ibid*.
- Richard D. Irwin, Inc., for:
 Material by Miyoehei Shinohara and Hisao Kanamori, reproduced with permission from *Economic Growth: The Japanese Experience since the Meiji Era*, Klein and Ohkawa, eds. (Homewood, Ill.: Richard D. Irwin, Inc., 1968 c.), pp. 284, 323.
 Material from Henry William Spiegel, *The Brazilian Economy, 1949*, p. 123.
- The Johns Hopkins University Press, for material from Hans H. Landsberg et al., *Resources in America's Future*, published for Resources for the

- Future by the Johns Hopkins University Press, 1963. © 1963, The Johns Hopkins Press, Baltimore 18, Maryland.
- The *Journal of Economic History*, for material from Jeffrey G. Williamson, "Urbanization in the American Northeast, 1820-1870," originally published in *The Journal of Economic History*, December 1965.
- W. Arthur Lewis, for material from "The Terms of Trade," a pedagogical note.
- LiberLäromel Lund (formerly CWK Gleerup), for material from Lennart Jörberg, *A History of Prices in Sweden, 1732-1914*.
- Lloyds Bank Review*, for material from F. W. Paish, "Inflation, Personal Incomes and Taxation," *Lloyds Bank Review*, no. 116 (April 1975).
- The London School of Economics and Political Science, for material from "Seven Centuries of the Price of Consumables, Compared with Builders' Wage-Rates," by E. H. Phelps Brown and Sheila V. Hopkins, *Economica*, November 1956.
- Longman Australia Pty Limited, for material from E. A. Boehm, *Twentieth Century Economic Development in Australia*.
- McGraw-Hill Publications Company, for material from McGraw-Hill Publications' Economics Department's Special Table on Capital Spending Plans of the Energy Industry, May 7, 1976.
- Macmillan Publishing Co., Inc., for material from *History of the National Economy of Russia to the 1917 Revolution* by Peter Lyashchenko; translated by L. M. Herman. Copyright, 1949, by American Council of Learned Societies.
- Methuen & Co., Ltd., publishers, for material from M. M. Postan, *An Economic History of Western Europe, 1945-1964*.
- M.I.T. Press, for material from W. W. Rostow et al., *The Prospects for Communist China*.
- Mitre Corporation and Charles A. Zraket, for material from *Energy Resources for the Year 2000 and Beyond*, MTP-401, March 1975, C. A. Zraket, Mitre Corp.
- Motor Vehicle Manufacturers Association (formerly Automobile Manufacturers Association), for material from *Automobile Facts and Figures*, 21st edition, 1939.
- National Association of Business Economists and Geoffrey H. Moore, for material from Geoffrey H. Moore, "The State of the International Business Cycle," *Business Economics*, vol. 9, no. 4 (September 1974).
- National Bureau of Economic Research, for material as follows:
- Permission granted by National Bureau of Economic Research to reprint from O. J. Firestone, "Development of Canada's Economy, 1850-1900," *Trends in the American Economy in the Nineteenth Century*, Copyright © 1960 by National Bureau of Economic Research, Inc.
- Permission granted by National Bureau of Economic Research to reprint from Solomon Fabricant, *The Output of Manufacturing Industries, 1899-1937*, Copyright © 1940 by National Bureau of Economic Research, Inc.
- Permission granted by National Bureau of Economic Research to reprint from Richard A. Easterlin, *Population, Labor Force, and Long Swings in Economic Growth*, Copyright © 1968 by National Bureau of Economic Research, Inc.
- Permission granted by National Bureau of Economic Research to reprint from Oskar Morgenstern, *International Financial Transactions and Business Cycles*, Copyright © 1959 by National Bureau of Economic Research, Inc.
- Permission granted by National Bureau of Economic Research to reprint from Arthur F. Burns, *The Business Cycle in a Changing World*, Copyright © 1969 by National Bureau of Economic Research, Inc.
- Permission granted by National Bureau of Economic Research to reprint from Ilse Mintz, *Trade Balances during Business Cycles: U.S. and Britain since 1880*, Copyright © 1959 by National Bureau of Economic Research, Inc.
- Permission granted by National Bureau of Economic Research to reprint from G. Warren Nutter, assisted by Israel Borenstein and Adam Kaufman, *The Growth of Industrial Production in the Soviet Union*, Copyright © 1962 by National Bureau of Economic Research, Inc.

- Permission granted by National Bureau of Economic Research to reprint from William H. Shaw, *Value of Commodity Output since 1869*, Copyright © 1947 by National Bureau of Economic Research, Inc.
- National Tax Journal and Joseph E. Pluta, for material from Joseph E. Pluta, "Growth and Patterns in U.S. Government Expenditures, 1956-1972," *National Tax Journal*, vol. 27, no. 1 (March 1974).
- The New York Times Company, for material from *The New York Times*, December 24, 1975, © 1975 by The New York Times Company. Reprinted by permission.
- North-Holland Publishing Company, Hollis B. Chenery, and Lance Taylor, for material from Hollis Chenery and Lance Taylor, "Development Patterns: Among Countries and over Time," *Review of Economics and Statistics*, vol. 50, no. 4 (November 1968).
- W. W. Norton & Company, Inc., for material reprinted from *In the Human Interest* by Lester R. Brown. By permission of W. W. Norton & Company, Inc. Copyright © 1974 by W. W. Norton & Company, Inc.
- OECD Observer, for material reprinted from the *OECD Observer*, February 1971; August 1972; August 1974; October-November 1974; and July-August 1975.
- Organization for Economic Cooperation and Development, for material from Mo-Huan Hsing, "Taiwan: Industrialization and Trade Policies," in *Industry and Trade in Some Developing Countries: The Philippines and Taiwan*, © Copyright OECD, published by Oxford University Press, U.K.
- Oxford University Press, for material from:
- E. H. Phelps Brown and Sheila V. Hopkins, "The Course for Wage-Rates in Five Countries, 1860-1939," *Oxford Economic Papers*, vol. 2 (1950), by permission of the Oxford University Press.
- World Population: Past Growth and Present Trends*, 1936, by A. M. Carr-Saunders, published by the Oxford University Press.
- Pacific Affairs*, for material from Fred W. Riggs, *Formosa under Chinese Nationalist Rule*.
- Praeger Publishers (now a division of Holt, Rinehart & Winston), for material from Robert E. Looney, *The Economic Development of Iran*. © 1973 by Praeger Publishers, Inc.
- Prentice-Hall, Inc., for material from Douglass C. North, *The Economic Growth of the United States, 1790-1860*, © 1961, pp. 74, 93, 95, 137. Reproduced by permission of Prentice-Hall, Inc., Englewood Cliffs, New Jersey.
- Princeton University, International Finance Section, and Arthur I. Bloomfield, for material from Arthur I. Bloomfield, *Patterns of Fluctuation in International Investment before 1914*, Princeton Studies in International Finance No. 21. Copyright © 1968, by International Finance Section, Department of Economics, Princeton University.
- Princeton University Press, for:
- Selection from Table 121 in Irene B. Taeuber, *The Population of Japan* (copyright © 1958 by Princeton University Press), p. 311. Reprinted by permission of Princeton University Press.
- Selections from Table 1 in Ansley J. Coale and Melvin Zelnik, *New Estimates of Fertility and Population in the United States* (copyright © 1963 by Princeton University Press), pp. 21-23. Reprinted by permission of Princeton University Press.
- The Royal Society, Joel Darmstadter, and Sam H. Schurr, for material from J. Darmstadter and S. H. Schurr, "World Energy Resources and Demand," *Philosophical Transactions of the Royal Society of London*, 1974, A.276, p. 413 (extracts).
- Stanford University Press, for material:
- Reprinted from *Japanese Economic Growth: Trend Acceleration in the Twentieth Century* by Kazushi Ohkawa and Henry Rosovsky with the permission of the publishers, Stanford University Press. © 1973 by the Board of Trustees of the Leland Stanford Junior University.
- Reprinted from *China's Modern Economy in Historical Perspective*, edited by Dwight H. Perkins, with the permission of the publishers, Stanford University Press. © 1975 by the Board of Trustees of the Leland Stanford Junior University.
- Statistical Publishing Society, Calcutta, for material from M. Mukherjee, *National Income of India: Trends and Structure*.

- Universe Books, for material from *THE LIMITS TO GROWTH: A report for THE CLUB OF ROME's Project on the Predicament of Mankind*, by Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, William W. Behrens III. A Potomac Associates book published by Universe Books, New York, 1972. Graphics by Potomac Associates.
- University of California Press, for material from:
 Morris David Morris, *The Emergence of an Industrial Labor Force in India: A Study of the Bombay Cotton Mills, 1854-1947*, Copyright © 1965 by The Regents of the University of California; reprinted by permission of the University of California Press.
 James W. Wilkie, *The Mexican Revolution: Federal Expenditure and Social Change since 1910*, rev. ed. Copyright © 1967, 1970 by The Regents of the University of California; reprinted by permission of the University of California Press.
- The University of Chicago Press, for material from:
 Nathaniel H. Leff, "Tropical Trade and Development in the Nineteenth Century: The Brazilian Experience," *The Journal of Political Economy*, vol. 81, no. 3 (May/June 1973). © 1973 by the University of Chicago.
 Charles Issawi (ed.), *The Economic History of Iran, 1800-1914*. © 1971 by the University of Chicago.
- University of Michigan Press, for material from Alexander Eckstein, *China's Economic Development*. Copyright © by The University of Michigan 1975.
- University of Ottawa Press, for material from O. J. Firestone, *Industry and Education: A Century of Canadian Development*.
- University of Toronto Press, for material from Kenneth Buckley, *Capital Formation in Canada, 1896-1930*.
- Verlag Weltarchiv GmbH, for material from *Intereconomics*, no. 1 (January 1975), p. 31.
- Wadsworth Publishing Company, Inc., for material from *The Management of Market-Oriented Economies: A Comparative Perspective* by Philip A. Klein. © 1973 by Wadsworth Publishing Company, Inc., Belmont, California 94002. Reprinted by permission of the publisher.
- The Wharton Magazine*, for material reprinted with permission from "Resource Shortage in an Expanding World" by Wilfred Malenbaum, *Wharton Quarterly*, © 1973.
- John Wiley & Sons, Inc., for material from:
Is the Business Cycle Obsolete? edited by Martin Bronfenbrenner. Copyright © 1969 by John Wiley & Sons, Inc. Reprinted by permission of John Wiley & Sons, Inc.
 Albert Fishlow, "The American Common School Revival: Fact or Fancy?" in *Industrialization in Two Systems: Essays in Honor of Alexander Gerschenkron by a Group of His Students*, edited by Henry Rosovsky. Copyright © 1966, by John Wiley & Sons, Inc. Reprinted by permission of John Wiley & Sons, Inc.
 John C. Fisher, *Energy Crises in Perspective*. Copyright © 1974, by John Wiley & Sons, Inc. Reprinted by permission of John Wiley & Sons, Inc.
 Charles P. Kindleberger, *The Terms of Trade: A European Case Study*. Copyright © 1956 by The Massachusetts Institute of Technology. Reprinted by permission of John Wiley & Sons, Inc.
- Yale University Press, for:
 Material reprinted by permission of the Yale University Press from *Modern Economic Growth* by Simon S. Kuznets. Copyright © 1966 by Yale University.
 Permission granted by Yale University Press to reprint from *The Mexican Economy* by Clark W. Reynolds, Copyright © 1970 by Yale University.
 Permission granted by Yale University Press to reprint from *Essays on the Economic History of the Argentine Republic* by Carlos F. Díaz Alejandro. Copyright © 1970 by Yale University.

Contents

List of Tables	<i>xvi</i>
List of Charts	<i>xxviii</i>
Preface	<i>xxxv</i>
Introduction	<i>xxxix</i>

PART ONE. THE DEMOGRAPHIC TRANSITION *i*

1. Two Centuries of Expansion in World Population *3*
2. Population Dynamics among the Early-Comers
to Industrialization *12*
3. Population Dynamics among the Late-Comers
to Industrialization *26*
4. The Contemporary Scene: A Preliminary View *39*

PART TWO. GROWTH SINCE THE EIGHTEENTH CENTURY: AN OVERALL VIEW *45*

5. Industrial Growth and Its Diffusion *47*
6. Growth and Structural Change *55*
7. International Trade and Its Changing Distribution *65*
8. Prices *81*
9. Relative Prices and the Terms of Trade *91*

PART THREE. TREND PERIODS *101*

10. Balanced and Unbalanced Growth *103*
11. 1790–1815 *111*
12. 1815–1848 *123*
13. 1848–1873 *146*
14. 1873–1920 *163*
15. 1920–1936 *203*
16. 1936–1951 *230*
17. 1951–1972 *247*
18. The Price Revolution of 1972–1976 *287*
19. Trend Periods Summarized *299*

PART FOUR. BUSINESS CYCLES 305

- 20. Cycles: Another Result of Unbalanced Growth 307
- 21. Cycles in the Eighteenth Century: 1700–1783 311
- 22. Cycles in the Classic Era: 1783–1914 314
- 23. Interwar Cycles: 1919–1939 331
- 24. Cycles in Growth Rates: 1945–1973 338
- 25. Inflation: The Price of Full Employment 349
- 26. Stagflation: 1974–1976 358

PART FIVE. STAGES OF ECONOMIC GROWTH: TWENTY COUNTRIES 363

- 27. Aggregate and Sectoral Analysis of Growth 365
- 28. Great Britain 373
- 29. The United States 384
- 30. France 394
- 31. Germany 401
- 32. Sweden 409
- 33. Japan 416
- 34. Russia-USSR 426
- 35. Italy 438
- 36. Canada 448
- 37. Australia 456
- 38. Argentina 466
- 39. Turkey 475
- 40. Brazil 481
- 41. Mexico 491
- 42. Iran 500
- 43. India 509
- 44. China 522
- 45. Taiwan 538
- 46. Thailand 547
- 47. South Korea 552
- 48. Four Conclusions 561

PART SIX. THE FUTURE OF THE WORLD ECONOMY 569

- 49. Are There Limits to Growth? 571
- 50. Population and Food 582
- 51. Energy 591
- 52. Raw Materials 610
- 53. Pollution and the Environment 619
- 54. Political Economy in the Fifth Kondratieff Upswing 625
- 55. Tasks of International Cooperation 644

Appendix A. Index of World Industrial Production, 1700–1971 659

Appendix B.	The Volume and Distribution of World Trade, 1720–1971	663
Appendix C.	The Size of the United States Motor Vehicle Sectoral Complex, Early 1970's	670
Appendix D.	Sources for Charted Data, Part Five	676
Notes		717
Author Index		813
Subject Index		820

Tables

- I-1. "Medium" Estimates of Population of the World and Major Areas, 1750–1950, and Projections to 2000 4
- I-2. Approximate World Population Growth Rates, 1750–1970 7
- I-3. Approximate Regional Population Growth Rates, 1750–2000 7
- I-4. Death Rate, 1911–1974, Indian Subcontinent 9
- I-5. Death Rate, 1896–1971, United Kingdom 9
- I-6. Net Reproduction Rates, Selected Advanced Industrial Countries, 1935–1939, 1955–1959, and Latest Figure 10
- I-7. Crude Birth and Death Rates of European Countries, 1841–1850 to 1951–1955 14
- I-8. Timing of the Demographic Transition in Europe, the United States, and Japan 16
- I-9. European, North American, and Japanese Birth and Death Rates, 1965–1971, in Relation to GNP per Capita 17
- I-10. World Intercontinental Migration, 1821–1932 19
- I-11. Estimated Growth of the White Population from Natural Increase and Net Immigration, by Decades, United States, 1800–1930 20
- I-12. The Demographic Transition of the United States, 1789–1971 23
- I-13. The Japanese Demographic Transition, 1920–1971 25
- I-14. Alternative Estimates of China's Population: United Nations, Aird, and Orleans 28
- I-15. Asian Countries Exhibiting a Rapid Decline in Birth Rates in Recent Years 30
- I-16. Population, Growth Rates, and Crude Birth and Death Rates: All Korea, 1925–1944, and Republic of Korea, 1945–1970 33
- I-17. Annual Average Rate of Growth of Population in Egypt and Algeria, 1800–1931 34

I-18.	Africa: Annual Average Rate of Population Increase, Birth Rates, and Death Rates, 1965-1971	35
I-19.	South Africa and Rhodesia: Birth and Death Rates by Race, 1967-1971	35
I-20.	Latin America: Decennial Rates of Increase of Population, 1920-1970	36
I-21.	Crude Birth and Death Rates in Four Middle American Countries, 1930-1970	37
I-22.	Latin American Population Growth, 1965-1971	37
I-23.	Percentage Demographic Transition Completed, 1960	39
II-1.	Index of World Industrial Production, 1705-1971	49
II-2.	Distribution of World's Industrial Production, 1820-1963	52
II-3.	Normal Variation in Economic Structure with Level of Development, 1950-1970	56
II-4.	Rates of Increase with Rising GNP per Capita: Investment and Government Revenue	59
II-5.	Stages of Growth and Public Revenue-Expenditure: Contemporary and Historical Ranges	60
II-6.	Illiteracy Rates: Contemporary and Historical	61
II-7.	World Trade and Industrial Production: Growth Rates, Selected Periods, 1705-1971	67
II-8.	World Trade and Its Distribution by Countries and Regions, 1720-1971	70
II-9.	Composition of United States Exports, 1890 and 1913	75
II-10.	Proportion of World Trade: India and China, 1938-1971, Selected Years	77
II-11.	Proportion of Foreign Trade to GNP: Developed Countries, Post-World War II Years	79
II-12.	African Trade, 1971	80
II-13.	Trade Proportions: Oceania, 1938, 1948, 1963, 1970	80
III-1.	Individual Manufacturing Industries Ranked According to Percentage Change in Physical Output, United States, 1899-1937	106
III-2.	Rate of Population Increase: Great Britain, 1731-1831	111
III-3.	Agricultural Capital: United Kingdom, Selected Dates, 1750-1887	112
III-4.	British Acts of Enclosure, 1788-1819	112
III-5.	Indexes of Agricultural and Industrial Prices: Great Britain, 1790-1820	114
III-6.	Building Cycles in Great Britain: Eighteenth Century	115
III-7.	Indicators of British Construction, 1792-1825	117
III-8.	U.S. Cotton Exports, 1794-1815	120
III-9.	U.S. Inventions: Patents Issued, 1790-1829	121
III-10.	Wheat Price: United States, 1810-1854	124
III-11.	French Retail Prices and Money Wages, 1806-1860	126
III-12.	U.S. Real Wages, 1820-1860	127

III-13.	Annual Average Food Imports: France, 1827-1860	129
III-14.	Cotton Data, 1813-1860	132
III-15.	Cotton Production by Areas and the U.S. Proportion, 1791-1860	137
III-16.	Growth of the New England Cotton Industry: Yards of Cloth Produced, 1815-1860	138
III-17.	Series Related to Building: United States and United Kingdom, 1820-1860	142
III-18.	Proportion of Laborers among U.S. Alien Arrivals, 1820-1855	144
III-19.	World Wheat Production, 1831-1840 to 1888	147
III-20.	U.S. Wheat Production and Related Series, 1840-1880	150
III-21.	The Expansion of World Railroad Mileage, 1840-1888	152
III-22.	World Production of Coal, Iron, and Energy, 1800-1889	155
III-23.	Real Wages: Great Britain, France, and the United States, 1840-1880	157
III-24.	World Wheat Production, 1871-1919	164
III-25.	Wheat Production Growth Rates, 1885-1919	167
III-26.	Russia: Wheat Production—Acreage and Related Series, 1831-1914	175
III-27.	Raw-Material Prices: United Kingdom, 1870-1913	176
III-28.	Real Wages and National Income per Capita, 1890-1913: France, Germany, United Kingdom, United States, and Sweden	182
III-29.	Shares of Agriculture and Industry in Value Added: United States, 1879-1919	190
III-30.	Foreign and Home Investment: United Kingdom, 1870-1913	192
III-31.	Income Distribution as a Proportion of GNP: United Kingdom, 1870-1913	192
III-32.	Steel and Coal Production: United Kingdom, 1913-1921	194
III-33.	Steel Ingot Production: The World and Major Regions, 1913-1925	194
III-34.	The Automobile as a Leading Sector: United States, 1909-1922	196
III-35.	Acceleration and Diversification of Industrial Production in Japan, 1909-1927	200
III-36.	Interwar World Wheat Production, 1914-1919	207
III-37.	Ratio of Agricultural Prices to Cost of Living: Selected Countries, 1924-1938	209
III-38.	Registered Motor Vehicles in European Countries and the United States, 1905-1938	210
III-39.	Production of Motor Vehicles in Four Leading European	

	Producing Countries and the United States, 1923-1938	210
III-40.	Number of Kilowatt-Hours Corresponding in Cost to One Ton of Coal, 1890-1949	214
III-41.	Production of Major Chemicals, 1913-1938	216
III-42.	Unemployment in Six European Countries and the United States, 1921-1938	220
III-43.	Annual Manufacturing Production: Ten Economies, 1913, 1929, 1932, 1938	222
III-44.	Rate of Immigration and Housing Construction in the United States, 1910-1939	224
III-45.	World Production of Major Commodities: Selected Years, 1938-1955	232
III-46.	Gross National Product at Constant Prices: Western Europe and the United States after the Second World War	234
III-47.	Index Numbers of Expenditure and Gross National Product at Constant Factor Cost: United Kingdom, 1938-1950	234
III-48.	Volume of Exports and Imports: 1950 as Percentage of 1938	236
III-49.	Official Soviet Economic Indexes: 1950 as Percentage of 1940	239
III-50.	Production in the Soviet Union in Certain Sectors, 1940, 1946, 1950	239
III-51.	Permanent Dwelling Units Started in Nonfarm Areas: United States, 1925-1950	243
III-52.	Intercontinental Immigration: Selected Countries, Single Years, 1945-1954	244
III-53.	World Export Prices, 1938-1972: Unit Value Index	248
III-54.	World Trade of Market Economies: Terms of Trade	248
III-55.	The Changing Pattern of World Grain Trade	251
III-56.	World Prices of Major Food Commodities, 1960-1973	252
III-57.	Index of World Food Security	252
III-58.	United States Energy Production and Consumption: Mineral Fuels and Electricity, 1940-1975	256
III-59.	Indexes of Industrial Production by Sectors: Western Europe, 1950 and 1963	260
III-60.	Some Leading Sector Indicators in Major Industrial Nations: 1963/1953; 1972/1963	262
III-61.	Growth of Output, Labor Force and Labor Productivity, Average Gross Investment Ratio, and Incremental Capital/Output Ratio in Selected European Countries, 1949-1959	265
III-62.	National Income and per Capita Growth Rates: The United States and Northwest Europe, 1950-1962	268
III-63.	Northwest Europe and the United States: Sources of	

- Growth of Total National Income and National Income
per Person Employed, 1950–1962 268
- III-64. Personal Consumption Expenditures by Product: United
States, 1960–1970 271
- III-65. Federal, State, and Local Expenditures as Proportions of
Gross National Product: United States, 1959, 1963,
1968 272
- III-66. Japan: Production of Major Commodities, 1961 276
- III-67. Japan: Classification of Goods According to the Rates of
Increase of Exports and Domestic Demand 278
- III-68. OECD: Comparative Growth of Expenditure on and
Enrollments in Higher Education, 1950's to 1960's 279
- III-69. OECD: From "Primary" Income to "Pure" Private
Consumption 282
- III-70. Comparative Growth Rates, Developing Regions: Selected
Regions, 1960–1970 284
- III-71. Net Flow of Official Development Assistance to Less
Developed Countries and Multilateral Agencies,
1960–1973 285
- III-72. Wholesale Prices by Stage of Processing: United States,
1972–1975, Annual 288
- III-73. Gross National Products and Price Indexes: OECD
Countries, 1959–1975 292
- III-74. Changes in Real GNP, 1973–1974: United States, Western
Europe, and Japan 294
- III-75. GDP Growth Rates by Groups of Developing
Countries 295
- III-76. Terms of Trade: Categories of Developing Countries,
1973–1975 296
- III-77. Net Capital Flows to Developing Countries,
1973–1975 297
- IV-1. British Business Fluctuations, 1700–1783 311
- IV-2. British Business Cycles: Cyclical Turning Points,
1783–1917 315
- IV-3. British Major Cycles, 1784–1914: Principal Directions
of Enterprise 317
- IV-4. Cyclical Turning Points: United States, France, Germany,
and Great Britain Compared, Pre-1914 Era 324
- IV-5. Business-Cycle Turning Points: United Kingdom, United
States, France, and Germany, 1919–1939 331
- IV-6. Phase Comparison of Reference Cycles: Three European
Countries and the United States 334
- IV-7. United Kingdom: Average Duration and Amplitude of
Cycles, Selected Periods, 1872–1964 339
- IV-8. United Kingdom: Average Amplitude of Fluctuations in
Unemployment and Gross Domestic Product, Selected
Periods, 1872–1964 339
- IV-9. United Kingdom: Amplitude of Fluctuations in

- Components of Gross Domestic Product at Constant
Market Prices, Selected Periods, 1872-1964 341
- IV-10. Gross and Net Instability Coefficients for Selected
Countries, 1950-1964 342
- IV-11. Business-Cycle Turning Points: Six Major Economies,
1945-1974 343
- IV-12. Growth Rates in the United States and Eight Other
Countries, 1953-1973 346
- IV-13. U.S. Cost-of-Living Indexes: Average Annual Rate of
Increase, 1945-1973 349
- IV-14. Consumer Price Indexes in the United States and Other
Major Industrial Countries, 1955-1974 351
- IV-15. Social Welfare Expenditures as a Percentage of GNP:
Eleven Countries, 1950-1972 360
- IV-16. Changes in Employment in the Private Nonfarm Economy:
Total and Selected Energy-Related Industries, November
1973-March 1974 361
- V-1. Rates of Growth: Total Product, Population, and Product
per Capita, Great Britain and United Kingdom,
1760-1967 378
- V-2. Approximate Timing of Leading Sectors: Great Britain,
1783-1972 379
- V-3. Value of Coal Exports as a Percentage of Total Value of
British Exports, 1830-1913 382
- V-4. Rate of Growth of Proportion of Urban Population to Total
Population: New England and the Middle Atlantic,
1790-1860 386
- V-5. Educational Level, Public Facilities: United States, by
Regions, 1861 387
- V-6. Rates of Growth: Total Product, Population, and Product
per Capita, United States, 1800-1967; Product per
Capita, United Kingdom, 1800-1967 388
- V-7. Approximate Timing of Leading Sectors: United States,
1790-1972 393
- V-8. Rates of Growth: Total Product, Population, and Product
per Capita, France, 1831-1966; Product per Capita,
United Kingdom, 1831-1966 395
- V-9. Gross and Net Capital Formation Proportions: France,
1788-1912 399
- V-10. Approximate Timing of Leading Sectors: France,
1700-1972 400
- V-11. Production and Consumption Standards per Head of
Population in Germany Compared with the United
Kingdom 402
- V-12. Rates of Growth: Total Product, Population, and Product
per Capita, Germany and Western Germany,
1850-1967; Product per Capita, United Kingdom,
1850-1967 403